

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Request by Nuclear Energy Institute and)	WT Docket No. 09-176
Utilities Telecom Council for Waiver To)	ET Docket 05-345
Permit the Use of Part 74 Two-Way)	
Wireless Headsets and Intercom Devices)	
Inside Nuclear Power Plants)	
)	

To: The Commission

Comments of EIBASS

Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (EIBASS), hereby respectfully submits its comments in the above-captioned Request for Comment relating to allowing Part 74 ineligible nuclear power plant (NPP) operators to use Part 74 Subpart H Low Power Auxiliary radios and frequencies.

I. Request Violates the April 9, 2007, ET Docket 05-345 Consent Agreement

1. The Office of Engineering and Technology (OET) ET Docket 05-345 rulemaking¹ culminated in an April 9, 2007, consent agreement (the "Consent Agreement") between the

¹ This rulemaking involves after-the-fact authorization for approximately sixty NPP operators to continue using Part 74, Subpart H, Low Power Auxiliary (LPA) wireless intercoms. These NPP operators purchased wireless headsets manufactured by Telex Communications. However, no licenses for their use were obtained, and for good reason: NPP operators are not eligible for LPA licenses. When this unlicensed use was questioned by an SBE frequency coordinator Telex obtained an experimental license, WB9XSY. However, this was a stop gap measure, to temporarily legalize the operation; in reality, there was nothing "experimental" about the use of wireless headsets by NPP operators. After OET declined to renew the Telex experimental license (one of the issues was that Telex had no control over how NPP operators used the headsets, and therefore Telex could not enforce its promise that the headsets would be used only inside the shielded containment vessel of a NPP), another organization, the Nuclear Energy Institute (NEI) applied for a replacement and essentially identical experimental license, WC9XCR. However, this experimental authority suffered from the same defects as the Telex experimental license, and OET again was not receptive to renewing the experimental authority.

NEI then petitioned the Office of Engineering and Technology (OET) to make NPP operators eligible for permanent Part 74 LPA licenses. In response, OET commenced a rulemaking, ET Docket 05-345.

SBE, NAB and MSTV filed in opposition, on the grounds that NPP operators are not eligible for a Part 74 license, and that wireless microphone frequencies on UHF TV channels have already become a scarce commodity due to the use of TV channels by DTV, Class A TV, LPTV, TV Translator stations, and, of course, full-service TV stations, all of which constitute higher-priority use. Also, NPP operators already have many Part 90 Power Radio Service frequencies available to them.

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Nuclear Energy Institute (NEI), the Utilities Telecom Council (UTC), the Association for Maximum Service Television (MSTV), the National Association of Broadcasters (NAB), and the Society of Broadcast Engineers, Inc. (SBE). This consent agreement is reproduced as Figure 1 to these EIBASS comments. The consent agreement was also uploaded to the ET Docket 05-345 record in the Electronic Comment Filing System (ECFS).

2. Item IV.B of the Consent Agreement was clear that the "experimental" operations were to terminate on February 17, 2009. This was a compromise position that was intended to allow NPP operators to gracefully transition from Part 74 wireless microphone use, for which they were ineligible, to operations that could be permanently licensed. It meant that broadcasters had to tolerate the dubious "experimental" operation of NPP operators on UHF TV broadcast channels for two additional years. In reality, the claim of experimental operation was nothing more than a tactic by NPP operators who had been caught in violation of requirement for an FCC license and in violation Part 74 eligibility restrictions. The proper course of action would have been for the Commission to have fined the various NPP operators for their unlicensed operation, and insisted that they obtain radio communication equipment in bands for which they were eligible and for which there were reserved frequencies (*i.e.*, the Part 90, Subpart C, Industrial/Business Radio Pool). Alternatively, NPP operators could have transitioned to unlicensed, Part 15 wireless communication devices, which the SBE comments had also demonstrated were available.

3. Nevertheless, the two year transition period for NPP operators to terminate their experimental operation has come and gone, and NEI/UTC now have the audacity to ask the Commission to continue this *de facto* opening of Part 74 LPA spectrum to non-eligible NPP operations. EIBASS strenuously objects to this proposal.

II. Claim of No Outdoor Use Is Not Credible

4. In its January 17, 2006, ET Docket 05-345 comments, SBE pointed out that the containment vessel of a NPP must be opened to the outside for refueling at 18 to 24 month intervals, and refueling typically lasts for 25 to 35 days. NEI did not dispute these facts. It is during these periods when worker communications are all the more critical. It is not credible to EIBASS that NPP operators will shut down their use of Telex headsets at the very time when

SBE, NAB and MSTV then entered in negotiations with NEI to reach a "consent" agreement that would allow NPP operators to temporary continue operation using their Telex headsets, with protocols to ensure no interference to the direct, over-the-air reception of TV signals, and further on a secondary basis to wireless microphone use by LPA licensees. That effort resulted in the April 9, 2007, Consent Agreement.

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communications are most important, and operations outside of the open containment vessel are taking place. Indeed, Section III.B of the Consent Agreement explicitly addressed the need to use the Telex headsets "outdoors but within the owner-controlled area." Further, Section III.C of the Consent Agreement required NPP operators to suspend outdoor use of Telex headsets not within the owner-controlled area within sixty days.

5. Since neither NEI nor UTC are the owners or operators of NPPs, EIBASS questions how either group can provide assurances as to the practices of persons who are not its employees and not under its direct jurisdiction. It is only the individual NPP operators who would be in a position to give such assurances.

6. Thus, the claim that no frequency coordination would be needed, should the continued use of Part 74 Telex headsets operating on TV channels nevertheless be allowed to continue under experimental licenses (which EIBASS hopes will not be the case), is also not credible.

7. EIBASS reminds the Commission that electronic news gathering (ENG) operations make heavy use of Part 74 wireless microphones, now confined to a reduced number of UHF TV channels. Should a news event occur at a NPP, especially during the refueling process, there would be a high likelihood of interference between legal, licensed, broadcaster and television network entity's use of wireless microphone frequencies and the use of those same frequencies by NPP personnel, and that potential interference from broadcasters to NPP operations would be occurring at the worst possible time. There could also be reciprocal interference to the properly licensed and legally used wireless microphones used by broadcast news crews when covering a breaking news story.

8. EIBASS notes the potential issue of hazard to public safety and questions why NPP operators should be permitted by the Nuclear Regulatory Commission (NRC) to use radios that have presumably not been approved by the NRC for use by NPP operators (since the Telex headsets are Part 74-only radios). Communications between NPP personnel, especially during the critical refueling process, would appear to be deserving of a dedicated frequency or frequencies, either already allocated Part 90 frequencies, or perhaps using the now available Lower or Upper 700 MHz bands, courtesy of broadcasters vacating those channels, often at great expense to themselves.

III. The Telex Web Site Reveals That It Has Become a Willing Partner To the Sale and Use of Its Part 74 Headsets by BAS-Ineligible Parties

9. When the sales of Telex headsets to BAS-ineligible NPP operators first surfaced in 2003, the Telex story line was that it had no idea that large numbers of its Part 74-only LPA headsets were being sold to, and used by, NPP operators. Also, it is conceivable that NPP operators did not realize that Telex headsets could only be licensed to BAS-eligible entities, which ruled out NPP operators. However, the Telex web site now documents not only that Telex is aware of the use of its products by BAS-ineligible NPP operators, but also that it is selling a new generation of such headsets to NPP operators. See the attached Figure 3, showing pertinent excerpts from the Telex web page.

10. EIBASS is disappointed that Telex is condoning the sale and use of its Part 74 only headsets to ineligible parties. A better and, in the opinion of EIBASS, highly ethical approach might be for Telex to utilize its new narrow band digital technology wireless headsets to create a licensable product that operates on available Part 90 radio frequencies. This would leave the very limited number of UHF TV channels still available for valid users of Part 74 wireless microphones for broadcast stations and eligible broadcast network entities.

11. EIBASS further notes that the Telex material documents that the headsets are used both inside and outside the NPP containment vessel; the pertinent text is yellow-highlighted in the attached Figure 3B. Clearly, Telex is continuing to market to NPP operators. Additionally, the Telex material indicates that training on its equipment at its workshops may be continuing, in violation of Section III.C of the Consent Agreement.

IV. EIBASS Does Not Concede Several Other NEI/UTC Claims

12. EIBASS disagrees with the NEI/UTC claim that there is no other suitable wireless microphone hardware or frequencies. To the contrary, in its January 17, 2006, ET Docket 05-345 comments, at Section VII, Paragraphs 30 through 33, SBE documented the availability of other duplex headset radio systems meeting all of the stated user requirements. Further, wireless headset technology has only improved in the intervening years. EIBASS notes that Telex has certainly contributed to that improvement.

13. EIBASS has seen no surveys or other type of verifiable documentation conducted by the operators of NPPs using Telex headsets on TV channel frequencies, to confirm that no interference has been caused to viewers living in the vicinity of an NPP. Thus, EIBASS does not concede the claim of "no interference to other licensees," because in addition to Part 74 LPA

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operation, "other licensees" includes over-the-air TV signals -- now all-digital for full-service stations, but still a mixture of analog and digital for Class A TV stations, LPTV stations, and TV Translator stations. In this regard, EIBASS notes that the SBE Docket 05-345 comments included a series of maps showing population distributions around eight randomly selected NPPs. Since this is a new rulemaking, with a different FCC bureau, those maps are attached to these EIBASS comments, so that they will be a record available in both rulemakings.

14. Finally, EIBASS is not persuaded by the claims that only wireless headsets operating on UHF TV channel frequencies can be made to work in and around a NPP. EIBASS believes that there are no technical reasons why 43, 150 or 450 MHz Part 90 Industrial/Business Pool frequencies couldn't be made to work just fine, using readily available existing radios.

V. Summary

15. EIBASS opposes what appears to be the renewal of sham experimental licenses issued to NPP operators for Telex headsets. There was, and is still, nothing "experimental" in such use. The granting of experimental licenses to NPP operators for a radio service in which they have no eligibility was unfortunate, and set an undesirable precedent of rewarding unlicensed use by ineligible entities. NPP operators have had several years in which to find substitute two-way radio headsets, and the ET Docket 05-345 Consent Agreement was generously entered into by broadcasters to allow NPP operators a graceful transition to radio bands in which they are eligible, yet it now appears that NEI/UTC had no intention of honoring that agreement. Further, it now appears that Telex is now a knowing partner to this use of its product by entities ineligible to obtain a Part 74 LPA license. EIBASS urges the Commission not to renew the experimental licenses, and to take enforcement action against any NPP operator that continues to operate on broadcast/BAS frequencies for which they hold no eligibility. Failure to do so may result in serious consequences the next time a news event occurs at a NPP venue.

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List of Figures

16. The following figures or exhibits have been prepared as a part of these WT Docket 09-176 comments:

1. April 8, 2007, ET Docket 05-345 NEI/UTC/MSTV/NAB/SBE Consent Agreement
2. Maps showing population distribution (2000 Census) around eight randomly selected NPPs from the list of 61 NPPs appended to the Consent Agreement
3. Excerpt from the Telex web page regarding Telex sales to NPP operators.

Respectfully submitted,

/s/ Dane E. Ericksen, P.E., CSRTE, 8-VSB, CBNT
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October 26, 2009

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April 9, 2007

VIA ELECTRONIC FILING

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th St., S.W.
Washington, DC 20554

**Re: Nuclear Energy Institute and United Telecom Council Request for Waiver; ET
Docket No. 05-345**

Dear Ms. Dortch:

The National Association of Broadcasters ("NAB"), the Association for Maximum Service Television ("MSTV"), and the Society of Broadcast Engineers ("SBE") (collectively, the "Broadcast Parties"), and the Nuclear Energy Institute ("NEI") and the Utilities (formerly "United") Telecom Council ("UTC") (collectively, the "Parties") hereby jointly submit this proposal to resolve the opposition to the above-referenced request for waiver of the Commission's rules. As discussed below, the Commission's adoption of this plan will serve the public interest by preventing an abrupt cessation of the commercial nuclear industry's use of certain Telex wireless intercom equipment (the "Telex Equipment") while ensuring that the temporary continuation of such use is consistent with the Commission's carefully crafted interference and frequency coordination standards.

Many nuclear power plants (the "Plants") use the Telex Equipment for communication among personnel during plant "outages" and in other circumstances, as expressly contemplated herein. NEI and UTC have represented that the Telex Equipment is presently the only equipment known by NEI and UTC to offer the requisite features and capabilities to allow plant workers to efficiently communicate and fulfill their obligations under the Nuclear Energy Commission's ("NRC") "ALARA" standard. The ALARA standard requires NRC licensees to make every reasonable effort to maintain exposures to radiation as far below the NRC-established dose limits as is practical, consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to the benefits to the public health and safety, and other societal and socioeconomic considerations, in relation to the utilization of nuclear energy and licensed materials in the public interest. 10 C.F.R. § 20.1003 et seq. Although the Telex Equipment transmits on Part 74 frequencies for which the Plants are not eligible users, since early 2003 the Commission has issued a series of Special Temporary Authorizations ("STAs") to permit the Plants' continued use of the Telex Equipment over Part 74 frequencies in order to accommodate the nuclear industry's efforts to limit plant worker exposure to radiation.

The Broadcast Parties do not dispute the Plants' need for reliable telecommunications. Nevertheless, it is imperative that the Plants engage in local frequency coordination, as required under the terms of the STAs. Frequency coordination contributes to the prevention of interference to other services in the band and to the protection of the Plants'

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wireless communications *from* interference. Also, based on the increasingly congested nature of the broadcast spectrum, it is in the public interest that this matter be carefully addressed and that there be a strategy for monitoring and swiftly developing alternative, frequency-compliant equipment.

The Parties have worked to forge a consensus plan that will enable the Plants, during the period specified herein, continued use of the Telex Equipment, on ~~an~~ experimental basis, while avoiding interference to licensed television services and encouraging the Plants' to migrate to frequencies for which they are eligible.

The terms of that plan are as follows:

- I. Nature of FCC Licensing
 - A. The Parties request that the Commission grant experimental licenses (the "Experimental Licenses") to each of the NRC-licensed Plants, thereby authorizing the Plants to utilize the Telex Equipment, solely in accordance with the terms described herein. These Experimental Licenses would be issued pursuant to Section 5.3(k) of the Commission's rules or such other provisions as the Commission may determine.
 - B. The Plants' use of the Telex Equipment shall constitute a secondary service and the Plants recognize that they are secondary to all Part 73 and 74 broadcast licensees (including but not limited to full power, Class A, translator, and low power broadcast television stations).
- II. Local Frequency Coordination
 - A. For each outdoor use of the Telex Equipment under an Experimental License (as that term is defined in Section I(A) hereof), a Plant will engage in local frequency coordination no sooner than thirty (30) days and no later than five (5) days prior to such use. (Indoor use of the Telex Equipment under ~~an~~ Experimental License shall not require frequency coordination.) Notwithstanding the foregoing, a Plant may use the Telex Equipment in a situation where it has engaged in local frequency coordination with less than five (5) days notice if such outdoor use is essential to the Plant's efforts to address an unforeseen and critical emergency situation.
 - B. To initiate the frequency coordination, a representative of the Plant must contact its local Broadcast Auxiliary Services ("BAS") frequency coordinator (using the list found at http://freq.sbe.org/pdf_files/coordinators.pdf, or a substitute list provided by SBE) and provide the following information: Physical location of the plant; proposed frequencies for operation of Telex Equipment; model number and description of Telex Equipment which user intends to use; name and e-mail address of a primary contact person at the user's location, and a phone number that will be staffed whenever the Telex Equipment is in operation. Such Plant representative should use the attached SBE/Nuclear Power Plant Local Coordination Form for conveying this information to the local frequency coordinator, unless the coordinating parties mutually agree to communicate using some other means (e.g., by e-mail, a web interface, other printed form). The Plants shall update the submitted information

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annually and shall have a continuing obligation to promptly update the information provided to the local frequency coordinator should that information change.

- C. Plants using the Telex Equipment shall factor into their operations whatever information is provided in response to their timely coordination submission. Such information may include data on which frequencies are believed to be available for use of the Telex Equipment, and the dates and times during which such frequencies are believed to be available. The Parties acknowledge that ultimately it is the legal obligation of the Plants to avoid interference to licensed users to which they are secondary and that coordination information provided by local frequency coordinator(s) shall not constitute an approval or disapproval of a Plant's particular use of the Telex Equipment. As SBE has explained in prior comments to the FCC, local volunteer frequency coordinators serve as a "clearinghouse" or "facilitator" among users of the BAS spectrum and do not "assign" a specific frequency to users or act as enforcers of the law.

III. Terms of the Use of the Telex Equipment.

- A. Use Inside the Plant. The commercial nuclear industry may use the Telex Equipment inside all plant buildings at maximum power levels of 125mW, both for transmitter power output (TPO) and also for effective radiated power (ERP).
- B. Use Outdoors but Within the Owner Controlled Area. The commercial nuclear industry may use the Telex Equipment outdoors, within the "owner controlled area" (defined as the area inside the outer perimeter fence or, for Plants that do not have a fence at their outer property line, the area inside the outer perimeter of the Plants' contiguous property line), at maximum power levels of 125mW for (i) outage-related operations, defined to mean communications in potentially hazardous circumstances or conditions during a Plant's "outage" process; (ii) fuel handling and movement; and (iii) radiological material handling.
- C. Use Outdoors, not Within the Owner Controlled Area. Any Plant's use of the Telex Equipment outdoors (but not within the "owner controlled area") other than that specified in Section III(B) herein, including for purposes of training, is not authorized by this consensus plan and shall be discontinued as soon as reasonably possible but in no event later than sixty (60) days after the grant by the Commission of the Experimental License for the Plants currently using the Telex Equipment in this manner. Further, the Plants that are not currently using the Telex Equipment in the manner contemplated by this Section C shall not be permitted to initiate such use following the execution of this consensus plan.
- D. Reiteration of Non-Interference Obligation. For the avoidance of doubt, the Parties acknowledge that, while certain interference mitigation techniques such as the distance separation requirements of Section 74.802(b) will not apply to an Experimental License, the Plants shall have an absolute obligation to not interfere with existing Part 73 and 74 licensees in the broadcast television spectrum, as described in Section I(B), above. This non-interference standard shall ultimately be

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determinative of the Plants' use of the Telex Equipment regardless of their distance from co-channel television broadcast operations.

IV. Licensing and Reporting Requirements

- A. As noted in Section I(A), the Parties request that, because each Plant will be responsible for conducting its own frequency coordination and FCC reporting, as specified in Section IV(C) hereof, each Plant should receive its own Experimental License, pursuant to the terms set forth herein.
- B. Each Experimental License shall specify a term that commences upon the FCC grant and expires on February 17, 2009.
- C. Each Experimental License shall expressly bind the Plant to the terms and conditions described in this letter.
- D. Within six months of the grant of each Experimental License, and every twelve months thereafter during the term of its Experimental License (each, a "Reporting Date"), each Plant shall submit a report consistent with Section 5.73 of the Commission's rules summarizing its use of the Telex Equipment to confirm that the Plants have operated in compliance with the terms and conditions set forth herein. The Plants will also provide any additional information required by the Commission as a condition of the Experimental License.
- E. NEI and UTC shall engage in an ongoing educational campaign to remind, at reasonable intervals, the Plants of their legal obligations under this Agreement.
- F. On each Reporting Date, NEI and UTC shall submit a report regarding their efforts to identify or develop equipment that operates in Part 90, or other frequencies for which the Plants are eligible, and which is capable of satisfying the Plants' communication and safety needs, with the goal of the Plants ceasing their use of the Telex Equipment on Part 73 and 74 spectrum.
- G. The Plant will notify the Commission promptly upon location of such Part 90, or other equipment for which the Plant would be eligible to receive an FCC license.
- H. The Plants recognize that, as secondary service users, they are accepting the risk of interference to their use of the Telex Equipment as contemplated herein. The Plants also acknowledge that this **risk** of interference could increase further as a result of the Commission's plan to repack the spectrum currently used by broadcast television, in connection with the end of the DTV transition. NEI and UTC acknowledge, and by applying for the Experimental License the Plants acknowledge and accept the **risk**, that Plants using Telex Equipment may receive harmful interference from incumbent operations and that such interference may disrupt communications among Plant personnel.

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- I. The Broadcast Parties reserve the right to petition the FCC for cancellation of a Plant's Experimental License in the event that such Plant materially violates the terms of its Experimental License.

A guiding principle of the plan proposed by the Parties is the minimization of interference within the congested broadcast spectrum. Consistent with that principle, the Parties reiterate their objection to the attempt of the New America Foundation ("NAF") to use this proceeding to promote the proliferation of an unlimited number of unlicensed devices into the broadcast spectrum at unacceptably high emission levels. NAF and its allies would have the Commission authorize such devices without **any** reliable mechanism for preventing or policing interference to licensed users in the band. That proposal, as the Broadcast Parties have explained elsewhere, would ultimately render the spectrum unusable for everyone, include users of the Telex Equipment.

[Signature Page Follows]

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Accordingly, NAB, MSTV, SBE, NEI and UTC respectfully request that the FCC temporarily authorize the Plants' use of the Telex Equipment solely in accordance with the terms described above.

Respectfully submitted,

NUCLEAR ENERGY INSTITUTE

By: Ellen P. Ginsberg

Its: Vice President, General Counsel

Date: April 12, 2007

NATIONAL ASSOCIATION OF
BROADCASTERS

By: /s/ Marsha MacBride

Its: Executive Vice President,
Legal & Regulatory Affairs

Date: April 9, 2007

SOCIETY OF BROADCAST ENGINEERS

By: Chris Schen

Its: President

Date: April 9, 2007

UTILITIES TELECOM COUNCIL

By: [Signature]

Its: Vice President & General Counsel

Date: April 12, 2007

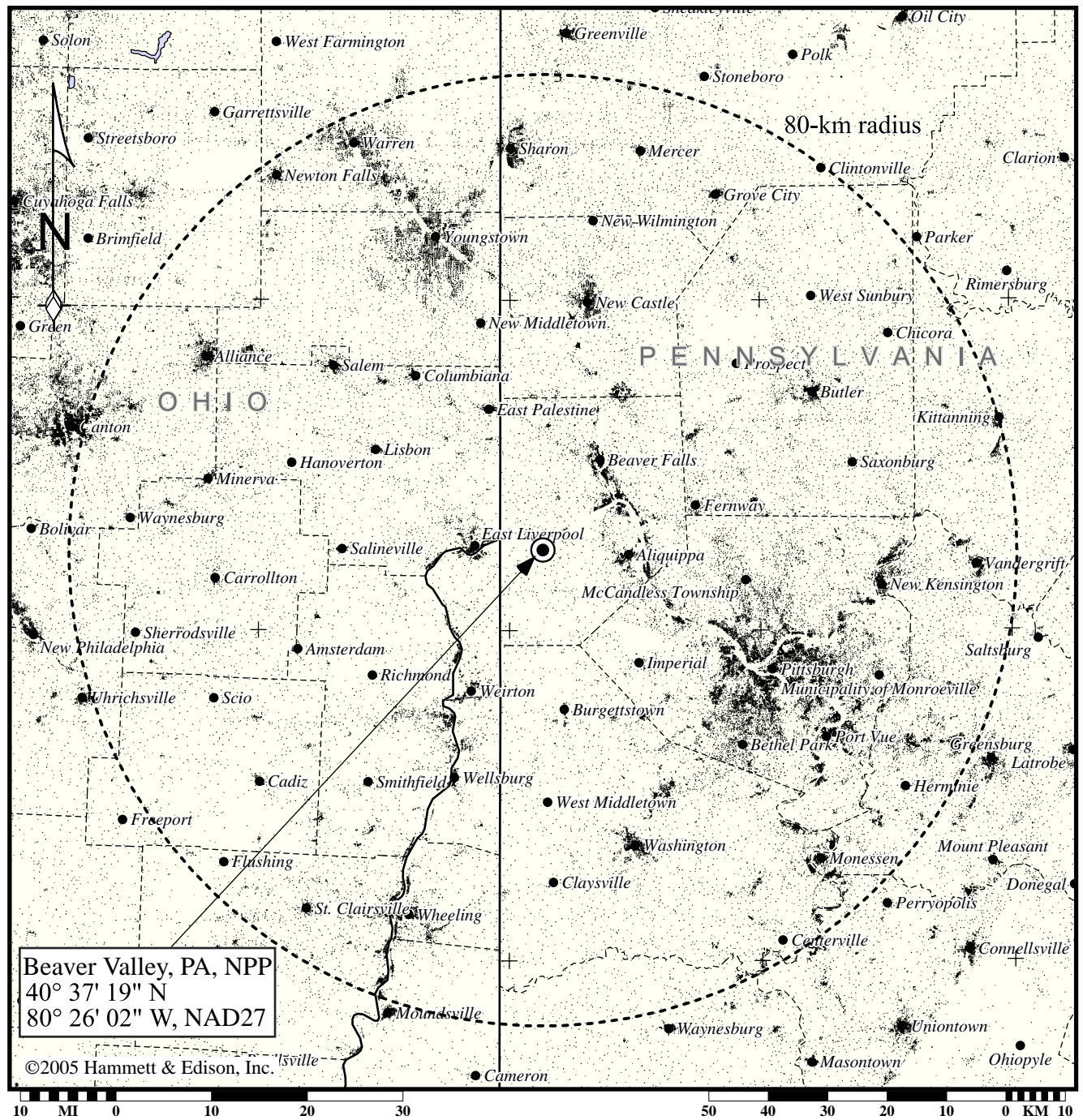
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TELEVISION, INC.

By: [Signature]

Its: President

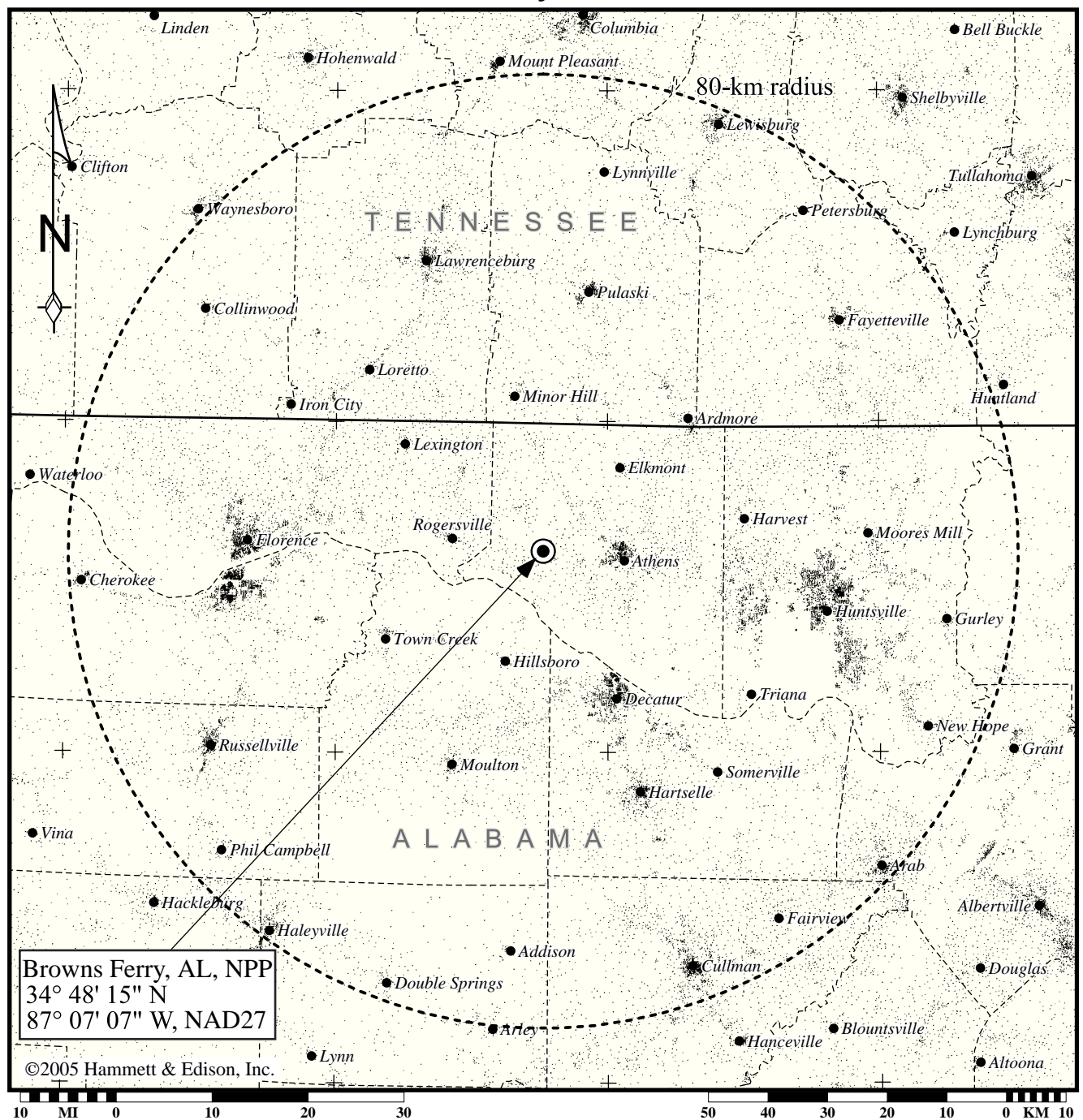
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Communities and Population Near the Beaver Valley Nuclear Power Plant



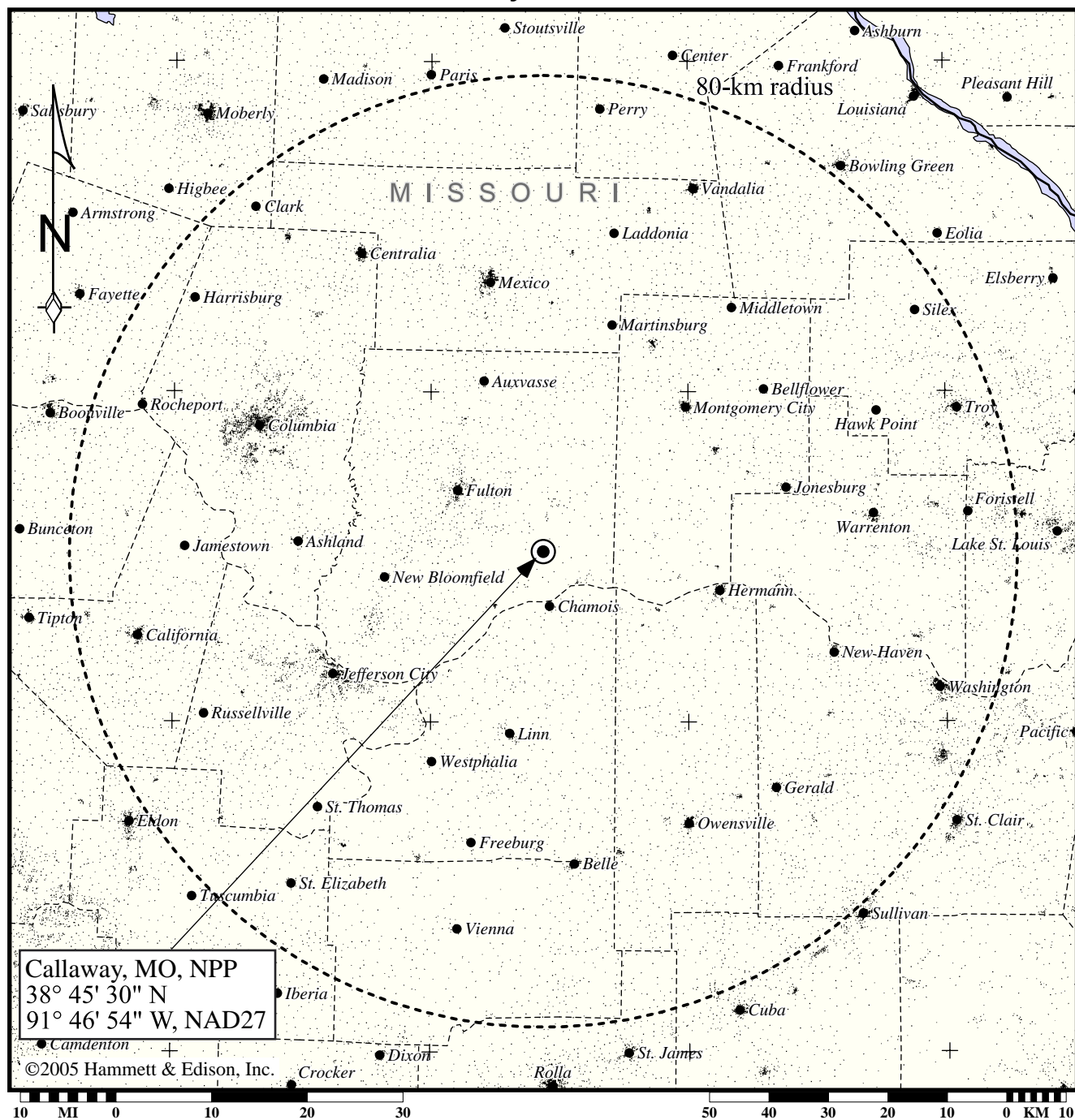
Dots represent 2000 U.S. Census Blocks. Lambert conformal conic map projection. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. City limits shown taken from U.S. Census Bureau TIGER/Line 2000 data.

Communities and Population Near the Browns Ferry Nuclear Power Plant



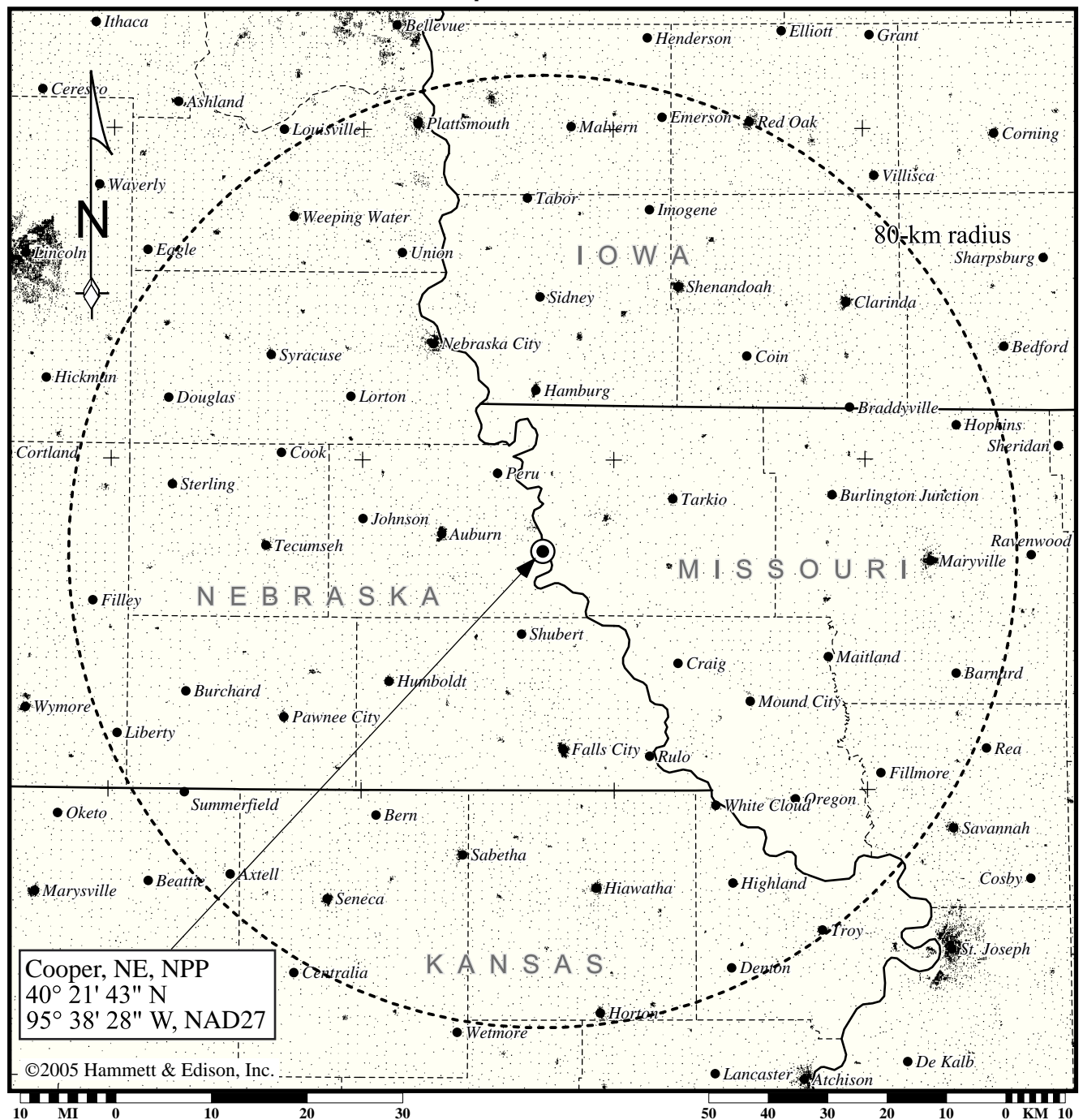
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Communities and Population Near the Callaway Nuclear Power Plant



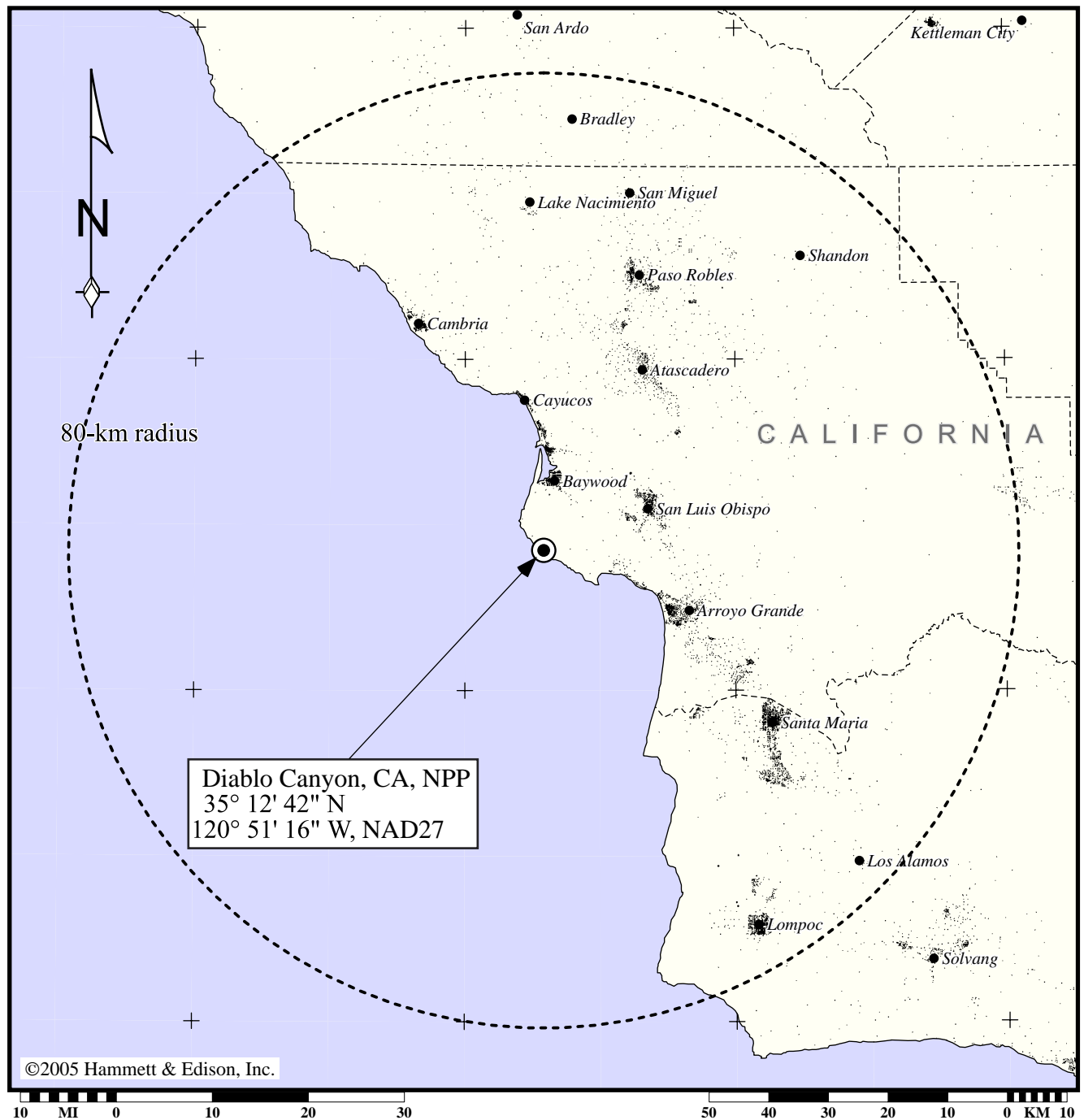
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Communities and Population Near the Cooper Nuclear Power Plant



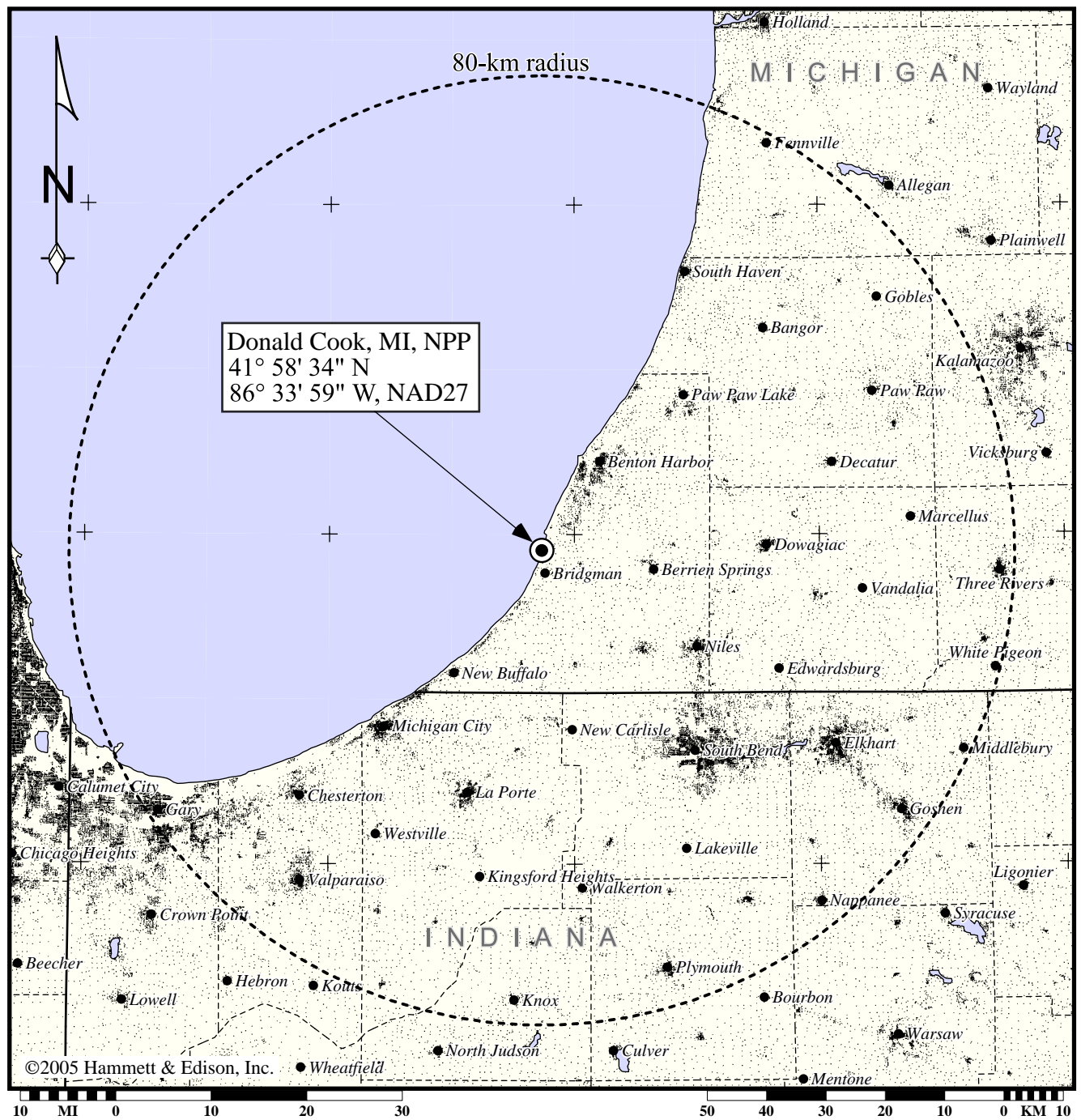
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**Communities and Population
Near the Diablo Canyon Nuclear Power Plant**



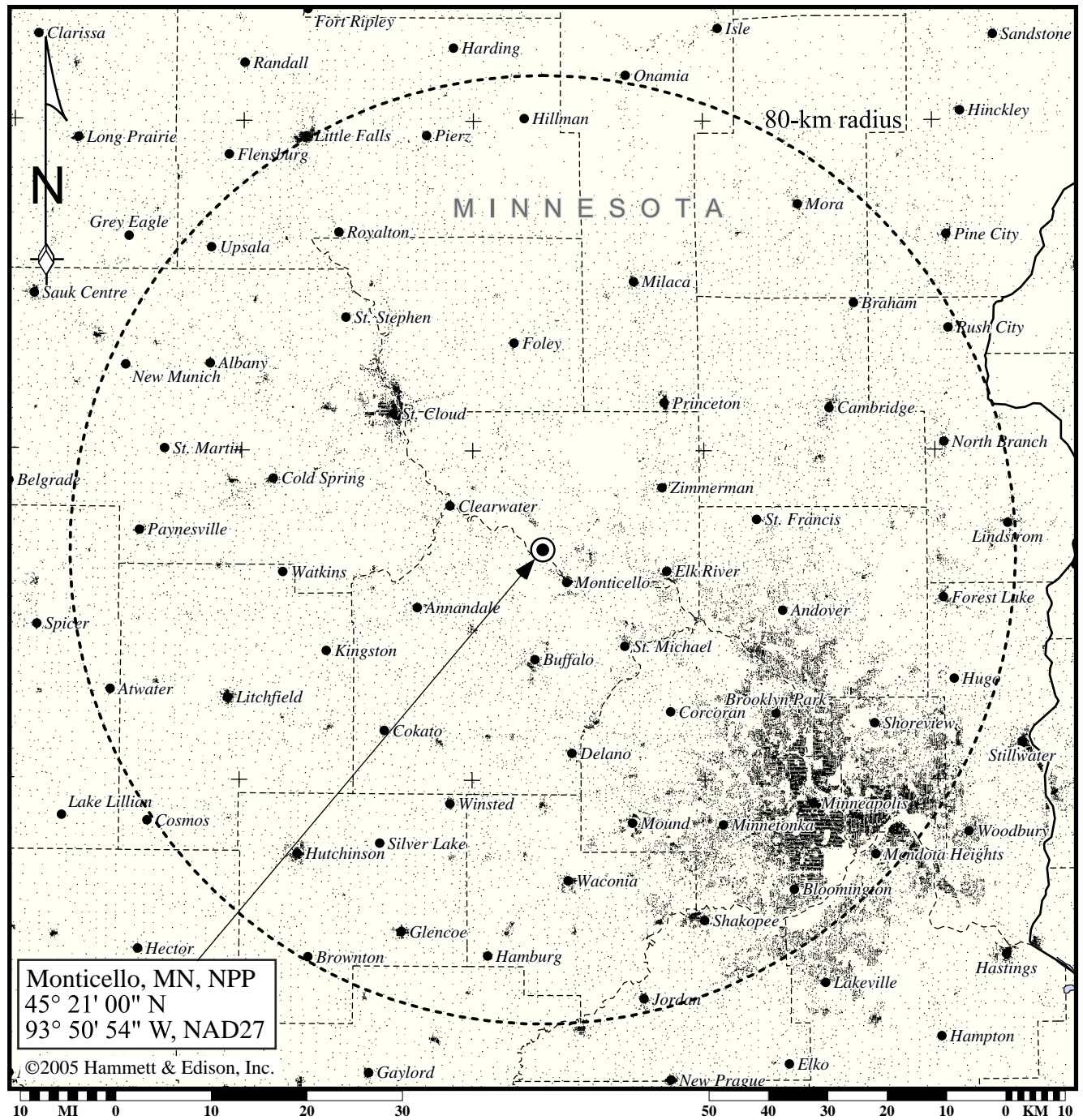
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**Communities and Population
Near the Donald Cook Nuclear Power Plant**



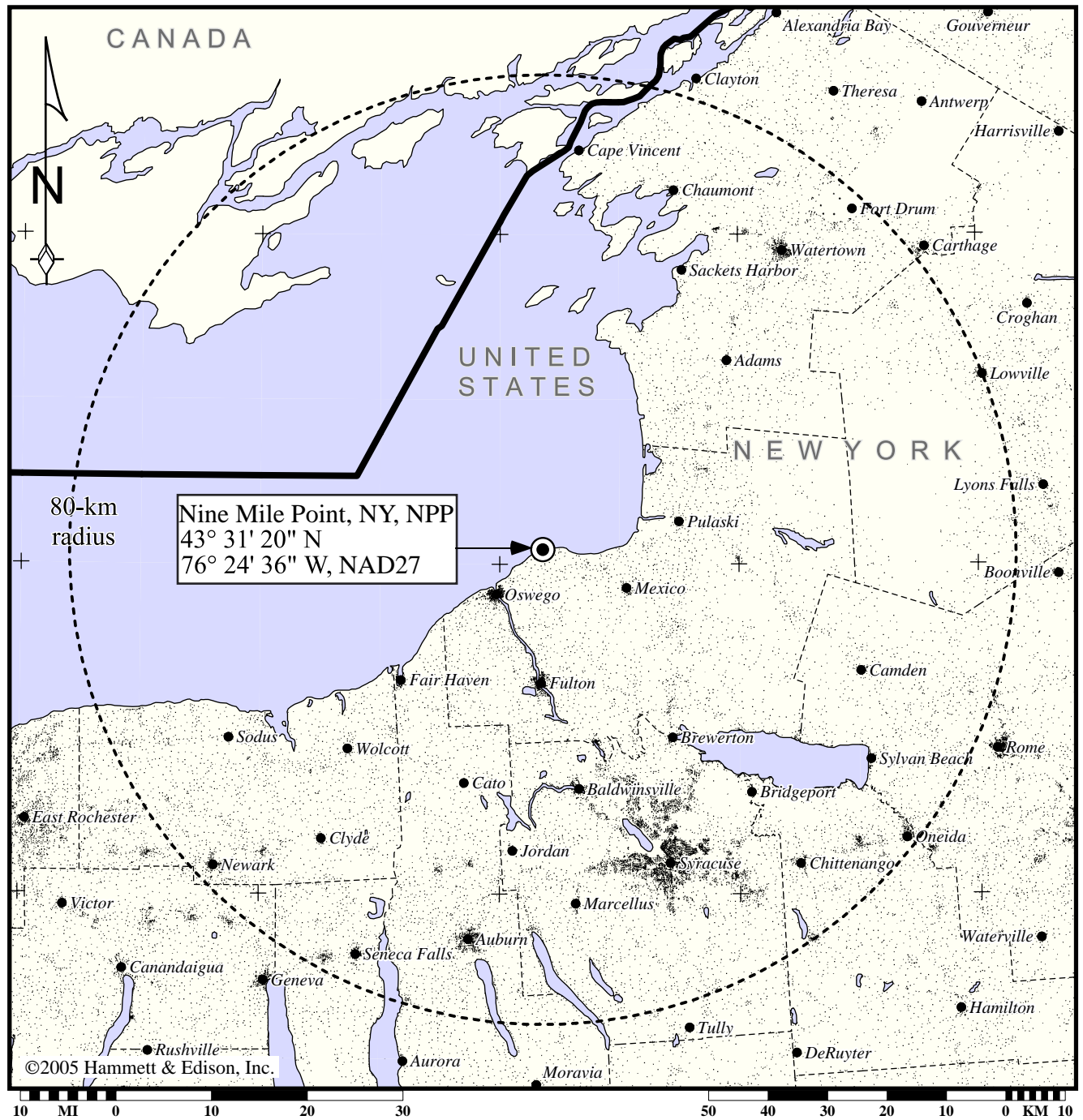
Dots represent 2000 U.S. Census Blocks. Lambert conformal conic map projection. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. City limits shown taken from U.S. Census Bureau TIGER/Line 2000 data.

Communities and Population Near the Monticello Nuclear Power Plant



Dots represent 2000 U.S. Census Blocks. Lambert conformal conic map projection. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. City limits shown taken from U.S. Census Bureau TIGER/Line 2000 data.

**Communities and Population
Near the Nine Mile Point Nuclear Power Plant**



Dots represent 2000 U.S. Census Blocks. Lambert conformal conic map projection. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. City limits shown taken from U.S. Census Bureau TIGER/Line 2000 data.

Excerpts from Telex Web Site Regarding NPP Operators Using Part 74-only Telex Wireless Headsets

Telex RadioCom Solutions for Critical Communications 10/20/09 2:46 PM

Home | Products | Markets | Downloads | Support | Press Room | About Us | Contact | How to Buy | How to Rent

Markets

Home > Markets > Critical Communications

Critical Communications



Critical nuclear facilities trust Telex RadioCom wireless intercom systems when it matters most.

Featured Success Story

RTS & Telex Intercom Hold 8th Annual Nuclear Outage Communications Workshop
Bryan Wilkins



2009-06-15 Every year, RTS & Telex invite users from the nuclear power plant community to attend a workshop on outage communications. Held at the specialized training academy inside RTS & Telex's Twin Cities headquarters, the two-day workshop guides attendees through all aspects of intercom configuration and usage. ...

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Upcoming Exhibitions

NABSHOW <small>Where Content Comes to Life</small>	infoComm
2010-04-12 — 2010-04-15 Las Vegas Convention Center Las Vegas, NV United States www.nabshow.com	2010-06-09 — 2010-06-11 Las Vegas Convention Center Las Vegas, NV United States www.infocommshow.org

Product Lines

TELEX RadioCom

RTS Original Mobile Intercom
RTS Two-Wire Intercom

TELEX AudioCom

TELEX Intercom Headsets

Case Studies

- RTS & Telex Intercom Hold 8th Annual Nuclear Outage Communications Workshop**
2009-06-15
- NOAA and the Institute for Exploration Discover Secrets of the Gulf with RTS**
2007-10-24
- Kaplan Medical Education Services Uses RTS to Link Their Exam Rooms**
2006-07-27
- Explorers Revisit Titanic**
2004-07-07
- Telex/RTS Intercom Used Throughout Dr. Robert Ballard's "Return to Titanic" Expedition**
2004-06-07

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Excerpts from Telex Web Site Regarding NPP Operators Using Part 74-only Telex Wireless Headsets

Communications Systems



June 15, 2009

RTS & Telex Intercom Systems holds eighth annual Nuclear Outage Communications Workshop

Every year, RTS & Telex invite users from the nuclear power plant community to attend a workshop on outage communications. Held at the specialized training academy inside RTS & Telex's Twin Cities headquarters, the two-day workshop guides attendees through all aspects of intercom configuration and usage.

June 15, 2009, Burnsville, MN In a nuclear power plant, safety is always the top priority. Walls are heavily fortified with concrete and heavy gauge steel rebar that can be several feet thick. Entering & exiting the containment chamber where radioactive elements are stored involves a series of preparations that must be highly coordinated. Naturally, all of these precautions create a challenging environment in which to maintain essential communication, particularly with regard to wireless users. That is why power plants choose RTS digital matrices interfaced with BTR wireless intercom systems from Telex.

In a typical nuclear outage, users on either side of the containment barrier must transmit messages to each other clearly and reliably at all times to ensure that the procedure goes smoothly. There is no room for error and no second chances. Since RTS & Telex intercom systems are central to the operation, many power plants opt to train and certify their users through the RTS & Telex Nuclear Outage Communications Workshop.

Britt Bowers, Regional Sales Manager for RTS Intercom Systems, was one of the presenters at the workshop this year. "This was our highest attendance ever. We had approximately 30 nuclear plants represented, in addition contract suppliers," says Bowers. "Attendees take away knowledge [of the intercom system] and application capabilities that help them coordinate operations in their plants more simply, creating a safer working environment."

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Excerpts from Telex Web Site Regarding NPP Operators Using Part 74-only Telex Wireless Headsets

Communications Systems



The two-day workshop covers everything from maintaining wireless fidelity and setting up beltpack users to linking a digital matrix system to the plant's IP network and managing it via AZedit control software.

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"A typical nuclear plant features an RTS Cronus or ADAM digital matrix frame connected to several Telex RadioCom UHF synthesized wireless systems," Bowers explains. "Beyond that, every plant is different. Some interface two-way radios, telephones, fiber networks, copper -- you name it. It's our job to take those diverse requirements and design a system that works the way they need it to, when they need it to."

New to the agenda this year is the BTR-80N narrow band wireless intercom system. The Telex BTR-80N narrow band wireless intercom system offers the most comprehensive, user friendly and versatile set of features available in wireless intercom systems anywhere in the world. The narrow band system provides an unprecedented 25 kHz of modulated bandwidth, allowing more users per channel in the cramped UHF spectrum. The BTR-80N is based on the award-winning BTR-800 wireless intercom system, which has become a standard in the nuclear industry, and inherits features such as DSP digital processing and intelligent power control. The system offers up to four full duplex wireless TR-80N or TR-82N beltpacks per base station; an unlimited number of additional beltpacks can be added in half duplex operation. The highly scalable nature of the system means that users can install with confidence, growing their existing system if and when necessary without having to reinvest in redundant hardware.

Additional BTR-80N features include selectable transmitter power output, selectable receiver squelch control, RF meter display on base station and beltpack displays, remote battery indicators on base station display, low battery tone indicator on beltpack, AC or DC power input on base station, simultaneous two-wire and four-wire operation and more.

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